

Amendments to the Claims:

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) An optical interconnection circuit, comprising:
a substrate;
a first element ~~having that has~~ a light emitting function and that is fixed on the substrate by an adhesive;
a second element ~~having that has~~ a light receiving function and that is fixed on the substrate by an adhesive; and
an optical wave-guide ~~having an optical wave-guide member that is~~ formed on the substrate to connect the first element and the second element through which a light emitted by the first element transmits to the second element, substrate,
the second element receiving a light emitted by the first element through the optical wave-guide,
the optical wave-guide ~~being formed on the substrate to cover~~ covering a part of the first element and a part of the second element, and
the optical wave-guide contacting the part of the first element and the part of the second element, and
the optical wave-guide having a function to transmit an optical signal emitted from the first element to the second element.
2. (Canceled)
3. (Currently Amended) The optical interconnection circuit claimed in claim 1, ~~the optical wave-guide member of the optical wave-guide being installed in a~~ linear or planar manner on the substrate.
4. (Previously Presented) The optical interconnection circuit claimed in claim 1,

the optical wave-guide including a light scattering mechanism scattering light, and the optical wave-guide being installed in the vicinity of at least one of the first element and the second element.

5. (Original) The optical interconnection circuit claimed in claim 4, the light scattering mechanism being composed of a resin into which a light scattering particle is mixed.
6. (Original) The optical interconnection circuit claimed in claim 4, the light scattering mechanism being composed of a resin of which a surface is processed to comprise an irregularity thereon.
7. (Currently Amended) The optical interconnection circuit claimed in claim 4, the light scattering mechanism being composed of the optical wave-guide ~~member~~ of which at least one of the line width and the height differ from the other part.
8. (Original) The optical interconnection circuit claimed in claim 4, the light scattering mechanism being composed of at least one of a resin and a glass in which a light scattering particle is dispersed, and is dome-shaped.
9. (Currently Amended) The optical interconnection circuit claimed in claim 8, the optical wave-guide ~~member~~ being formed to cover the dome-shaped light scattering mechanism.
10. (Currently Amended) The optical interconnection circuit claimed in claim 1, the optical wave-guide including a light reflecting mechanism reflecting light, and the optical wave-guide being installed in the vicinity of at least one of the first element and the second element or on an edge part of the optical wave-guide ~~member~~.
11. (Currently Amended) The optical interconnection circuit claimed in claim 10, the light reflecting mechanism including a metal film formed on a surface of the optical wave-guide ~~member~~.

12. (Currently Amended) The optical interconnection circuit claimed in claim 10,
the light reflecting mechanism being composed of the optical wave-guide
~~member~~ of which a surface is coated with a coating material including a metal particle.
13. (Currently Amended) The optical interconnection circuit claimed in claim 10,
the light reflecting mechanism including a reflection plate having a reflection
plane attached to the edge part of the optical ~~wave-guide member~~; wave-guide; and
the reflection plate being disposed to be inclined to the substrate.
14. (Currently Amended) The optical interconnection circuit claimed in claim 13,
the optical wave-guide ~~member~~ being formed into the shape of a plurality of
lines, which are approximately parallel each other, on the substrate; and
the reflection plate being disposed on at least one edge of the plurality of lines,
and being one common reflection plate reflecting light transmitting in each of the plural lines.
15. (Currently Amended) The optical interconnection circuit claimed in claim 1,
the optical wave-guide ~~member~~ being deposited on a metal wiring pattern
installed on the substrate.
16. (Previously Presented) The optical interconnection circuit claimed in claim 1,
the thickness of the first element and the second element being twenty μm or
less.
17. (Previously Presented) The optical interconnection circuit claimed in claim 1,
the first element being one of an LED, a surface emitting laser, and a DFB
laser.
18. (Previously Presented) The optical interconnection circuit claimed in claim 1,
the second element being a surface photodiode or a phototransistor.
19. (Previously Presented) The optical interconnection circuit claimed in claim 1,
a third element being stacked on the first element.

20. (Previously Presented) The optical interconnection circuit claimed in claim 19,

the third element including a detecting device that controls light emitted from the first element, and a controlling device that controls light emitting operation of the first element based on the detected quantity of emitted light.

21. (Previously Presented) The optical interconnection circuit claimed in claim 1, each of the first element and the second element being electrically connected to an electronic circuit installed on the substrate.

22. (Currently Amended) A method of manufacturing an optical interconnection circuit, comprising:

bonding a plurality of elements to a substrate; and

installing an optical wave-guide ~~member~~ on the substrate to connect at least two elements to each other,

the optical wave-guide ~~member~~ being formed on the substrate to cover a part of a first element and a part of a second element, the optical wave-guide contacting the part of the first element and the part of the second element and the optical wave-guide having a function to transmit an optical signal emitted from the first element to the second element.

23. (Currently Amended) The method of manufacturing an optical interconnection circuit claimed in claim 22,

the plurality of elements including a first element emitting an optical signal and a second element receiving the optical signal; and

the optical wave-guide ~~member~~ being installed to transmit the optical signal emitted from the first element to the second element.

24. (Currently Amended) The method of manufacturing an optical interconnection circuit claimed in claim 22,

the optical wave-guide ~~member~~ being installed by coating the substrate and the micro tile element with a light curable resin, thereafter irradiating only an area of a desired pattern with light for patterning.

25. (Currently Amended) The method of manufacturing an optical interconnection circuit claimed in claim 22,

the optical wave-guide ~~member~~ being installed by coating the substrate and the micro tile element with a desired resin, thereafter using a photolithography method to pattern desired shape.

26. (Original) The method of manufacturing an optical interconnection circuit claimed in claim 24,

the coating being performed by using at least one of a spin coating method, a roll coating method, and a spray coating method.

27. (Currently Amended) The method of manufacturing an optical interconnection circuit claimed in claim 22,

the optical wave-guide ~~member~~ being installed by using a droplet ejecting method.

28. (Currently Amended) The method of manufacturing an optical interconnection circuit claimed in claim 27,

the optical wave-guide ~~member~~ being installed by installing a lyophobic area and a lyophilic area, which have a desired pattern, on the substrate and a surface of the plurality of elements, thereafter ejecting a resin onto the substrate and the plurality of elements by the droplet ejecting method.

29. (Currently Amended) The method of manufacturing an optical interconnection circuit claimed in claim 22,

the optical wave-guide ~~member~~ being installed by a pattern transferring method using a stamper.

30. (Currently Amended) The method of manufacturing an optical interconnection circuit claimed in claim 22,

the optical wave-guide ~~member~~ being installed by using a printing method.

31. (Currently Amended) The method of manufacturing an optical interconnection circuit claimed in claim 22,

the optical wave-guide ~~member~~ being installed by using a slit coating method in which a liquid resin is ejected from a slit-shaped gap.

32. (Original) An electro-optical device, comprising:

the optical interconnection circuit claimed in claim 1.

33. (Original) Electronic equipment, comprising:

the optical interconnection circuit claimed in claim 1.